



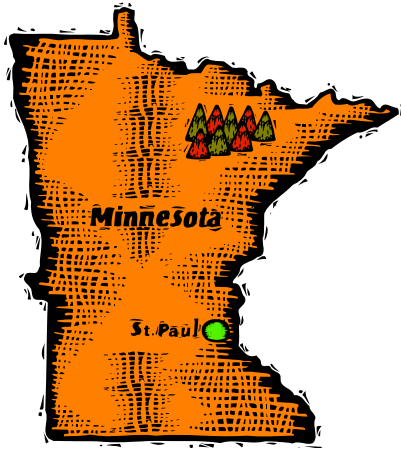
Tips and Tricks for Group Leaders at Minnesota Valley National Wildlife Refuge

- **Do** remind your students what it means to be a naturalist – being observant, quiet, curious, etc. This is a great way to get everyone focused and back on track!
- **Do** stay in front of the group. That way, everyone will have the same chance to see wildlife and share their discoveries.
- **Do** stop and sit down from time to time with your students. It's important to have quiet time in your group and work on your journal pages.
- **Do** ask questions to keep students engaged. (Ex. what do you see? What do you hear? Who might have made this hole? etc.) Even if you know the answer, allow them to make discoveries, even if they're "wrong."
- **Do** foster participation from all of your students.
 - If someone is reluctant, give them a "job" to do, or ask specific questions.
 - If one student is answering everything, encourage them to give others a chance.
 - If students are distracted or unfocused, bring them back into the task by asking a direct question, or encouraging them to explore a specific object.
- **Do** let the students figure out how to use the equipment - this is part of their learning process!
- **Do** encourage students to fill out their journal pages completely. Remember, they do *not* have to be perfect. (For example, you do not have to spell words for them...they can sound them out).
- **Don't** feel like you have to know all the answers. "I don't know" is acceptable, but "I don't know, but let's sketch it or make some notes and see if we can find out together when we get back" is even better! We encourage you to come back with unanswered questions!
- **Don't** be afraid to jump right in and explore, journal, and share discoveries with your group of students – everyone will enjoy themselves more if you're involved, and you can lead by example!

"If a child is to keep alive his inborn sense of wonder...he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement and mystery of the world we live in."

- Rachel Carson





Minnesota Biomes

Group Leader Guidelines

In this activity students will take a random plant sample in either the refuge prairie or woodland as is representative of those Minnesota biomes. Some groups might be asked to sample in both habitats. For your data to be valid, please remember to follow these three simple procedures.

- **Select a RANDOM Plot**— the goal of this activity is to collect one leaf from every type of prairie plant that grows here.

In the PRAIRIE

Avoid any bias toward colorful and “pretty” plants by instructing students to close their eyes, turn around a few times and then throw their Hula Hoop. Their sampling plot includes just the plants growing inside the hula hoop.

In the WOODLAND

Students use flagging to outline their survey plot. Have student teams of 2 spread out randomly in the woods. Instruct them to use the tape measure to build a 4 foot square that does not touch another team’s square.

- **Take only ONE LEAF** from every *different* plant found growing inside the sampling plot. **Do not collect seed heads.** Collecting only leaves helps ensure we are not counting any plant more than once or as a different specie.
- **Look for and Flag INVASIVE SPECIES.** In the prairie look for Leafy Spurge and Bull Thistle. In the Woodland look for Siberian Elm and Buckthorn. Use the pictures included in your backpack. If you are not sure tag it anyway. Refuge staff will confirm your findings after the field trip.

BEFORE LEAVING A STUDY PLOT

Encourage students to complete each section of their journal page. **A drawing of their leaf sample is especially important .** If there is time to complete a second plot, ask them to complete a second journal page for that plot also.



A NOTE ABOUT PLANTS

Stinging nettle, thistle, and poison ivy may be found in the survey area. Before sending students out to conduct the survey, be sure they are able to identify these plants. DO NOT collect a leaf from these plants! DO make a note on the journal page that these plants were found.